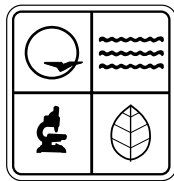


# MISSOURI

*Public Opinion Survey*  
on  
*Solid Waste Management*



May 2000

Prepared for the Missouri Department of Natural Resources  
by Pragmatic Research Inc., St. Louis, MO

**I. INTRODUCTION AND SURVEY METHODOLOGY****A. Introduction**

The Missouri Department of Natural Resources Solid Waste Management Program works to help Missourians and Missouri businesses properly manage their solid waste to protect public health and the environment. Reducing the amount of solid waste generated that is destined for landfills continues to be a primary goal of the program. Through the combined efforts of citizens, industry and government, the state can continue to increase the recovery of solid waste.

To help the Missouri DNR gain a better understanding of how the state's citizens feel, think, and act regarding issues related to solid waste management, it commissioned Pragmatic Research, Inc. to conduct a survey of Missouri residents regarding these and related topics. The information gathered through the survey will be incorporated with information obtained from other sources to enable the DNR to develop policies that meet the needs of Missouri citizens, specifically regarding the management of solid waste.

**B. Survey Methodology**

The questionnaire was designed by the Missouri Department of Natural Resources. Pragmatic Research, Inc. reviewed the survey and submitted minor revisions to ensure the survey items were technically correct and without bias. The final survey was then programmed using Pragmatic Research, Inc.'s CATI (Computer Aided Telephone Interviewing) software to enhance the data collection process.

A quota of 600 interviews was established, with 20 sub-quotas based on each Solid Waste Management region. The margin of error for the entire respondent base is +/- 3.92% at the 95 percent confidence level.

The sample was purchased by Pragmatic Research, Inc. using a 15-to-1 proportion based on the quotas, meaning 15 sample records were purchased for each completed interview required. The sample of approximately 9,000 records was provided in electronic format, and was randomized within each quota region.

Pragmatic Research, Inc. conducted a pilot survey pretest in October, 1999, and reviewed the results with the DNR. PRI then completed 624 interviews during November and December using our trained staff of interviewers. A three-attempt design was used to preserve the representativeness of the sample. Surveys were conducted primarily in the evening hours, using the CATI system. At all times at least one manager was monitoring the progress of calls.

Data tables were created using WinCross crosstabulation software. Significance testing was conducted between banner columns, within banner groups, for all data tables at the 95 percent confidence level. All rows were tested using the z-test (for percentages), while mean scores were tested using the t-test.

### **C. Sample Characteristics**

As detailed on the following table, the average respondent has a two-person household with no children. They live in a single-family house, in either a rural or suburban area. One-third of respondents are 60 or older, and one-third graduated high school only. The vast majority of these respondents are white and they are nearly evenly represented by gender.

**Table 1: Demographics****Percent n = 624**

<b>Number of adults in household</b>	1	20%	124
	2	68%	424
	3+	12%	75
<b>Number of children in household</b>	0	67%	417
	1	13%	78
	2	14%	86
	3+	7%	41
<b>Type of dwelling</b>	Single-family house	86%	537
	Multi-unit apartment/Condo	11%	67
	Other type of dwelling	3%	18
<b>Type of neighborhood</b>	Rural	41%	255
	Suburban	34%	211
	Urban or Downtown	25%	153
<b>Age</b>	Younger than 30	6%	40
	30-39	15%	91
	40-49	19%	121
	50-59	18%	112
	60 or older	35%	220
<b>Education Level</b>	Some high school or less	12%	76
	High school graduate	32%	200
	Some college or trade school	20%	122
	College graduate	22%	134
	Post graduate	8%	51
<b>Annual Income</b>	Less than \$25k	14%	90
	\$25-34K	11%	71
	\$35-49K	17%	105
	\$50-74k	14%	85
	\$75k or more	8%	52
	Refused	35%	221
<b>Ethnic Background</b>	Caucasian/White	92%	572
	African-American	5%	30
	Other ethnicity	2%	13
	Refused	1%	9
<b>Gender</b>	Male	51%	319
	Female	49%	305

## **II. EXECUTIVE SUMMARY**

### **Importance of Issues to Missourians**

When given a list of six issues, the majority of Missouri respondents say ‘education’ or ‘health care’ are the most important issues facing the state. The next most mentioned issues are ‘the economy,’ ‘safety and crime’ and ‘the environment,’ while ‘social services’ are rated least important.

### **Seriousness of Environmental Issues to Missourians**

When given a list of eight issues, Missourians who were surveyed rate ‘the management and disposal of solid waste’ and ‘the water quality in lakes, rivers and streams’ as the most serious environmental problems in the state. ‘Urban sprawl,’ ‘the quality of drinking water’ and ‘soil erosion’ are rated least serious.

Respondents say the most serious waste disposal problem facing the state is ‘dumping trash on public lands’ followed by ‘litter,’ while ‘individuals burning trash’ is rated lowest.

### **Perceived Performance of the Department of Natural Resources (DNR)**

Missourians surveyed indicate moderate satisfaction with the performance of the Department of Natural Resources (DNR), with 48 percent giving it ‘excellent’ or ‘good’ ratings. Only two percent of Missourians surveyed say they are not at all familiar with the DNR.

### **What Comes to Mind when Missourians Hear the Term “Solid Waste”**

Sixty-four percent of surveyed Missourians think of either ‘trash’ or ‘garbage’ when they hear the term ‘solid waste.’ The next most common mention is ‘sewage’ which may indicate some confusion about what solid waste is. Only a small number think of negative terms like ‘smell,’ ‘stench,’ ‘rats’ or ‘flies.’

### **Information Sources for Current Issues Related to “Solid Waste”**

The dominant source among Missourians surveyed for information about solid waste is newspapers, with 62 percent of respondents mentioning this source. The next most mentioned sources are television, newsletters and magazines and the radio.

### **Recycling Among Missourians**

Seventy-one percent of Missourians surveyed say they recycle. Aluminum cans are the item recycled most often, by 61 percent of respondents. The second and third most often recycled items are newspapers and plastic containers, while 26 percent of surveyed Missourians say they recycle glass.

### **Who in the Household Participates in Recycling**

Among surveyed Missourians who recycle, adults are usually completely or partially responsible for recycling.

### **Availability of Curbside Recycling**

Among surveyed Missourians who recycle, 67 percent take the recyclables to a drop off, while 26 percent have curbside recycling.

**The Main Reason Missouri Households Recycle**

Among surveyed Missourians who recycle, 48 percent say they recycle ‘to conserve resources’ while 43 percent say they recycle ‘to teach good values.’ Twenty-four percent say they recycle because ‘landfill space is limited’ and 20 percent of Missourians surveyed say they recycle for ‘the money.’

**Management of Yard Waste and Participation in Composting**

Eighty-six percent of Missourians surveyed live in a household that generates yard waste. Among Missourians surveyed who generate yard waste, 34 percent compost and 28 percent mulch the materials. Those who recycle are significantly more likely than their counterparts to compost their yard waste. Twenty-one percent of surveyed Missourians say their household composts kitchen waste.

**Household Makes Effort to Buy Items Made from Recycled Materials**

Forty-three percent of Missourians surveyed say they try to buy items made from recycled materials. Among those who make an effort to purchase recycled items, 57 percent say they buy any item that comes in a recycled package.

Sixty-seven percent of Missourians surveyed say products made from recycled materials offer the same quality as products made from new materials.

**Ways to Promote Recycling in Missouri**

Among Missourians surveyed who already recycle, curbside pickup of recyclables was the most frequent response regarding what would make them recycle more. Curbside pickup of recyclables was also the most frequent response given by those who do not recycle regarding what would make them more likely to recycle.

**Amount Missourians Would Be Willing to Pay to Recycle**

Among those surveyed who currently recycle, 55 percent say they are unwilling to pay anything extra so they *could* recycle (*if a fee were necessary*).

**Agreement that Manufacturers Share Responsibility for Recycling**

Fifty-eight percent of Missourians surveyed say manufacturers should share in the responsibility of recycling or disposing of the products they sell to consumers.

**Support for Increasing Disposal Costs to Make Other Alternatives More Cost Effective**

Missourians surveyed are nearly evenly divided regarding whether disposal costs (fees) should be increased to make the other alternatives more cost effective.

**Use of Ground Waste Tires as an Ingredient for Highway Pavement**

Eighty-six percent of Missourians surveyed support the increased use of ground waste tires as an ingredient in asphalt for paving highways.

**Availability of Trash Collection and Satisfaction with Trash Disposal Options**

Ninety percent of Missouri households are served by trash collection. Most Missourians surveyed report they are satisfied with their current form of trash removal.

**Trash Disposal Provider**

Seventy percent of surveyed Missourians who have trash pickup say their trash is collected by a private company, while 27 percent receive the service from their city or town.

**Household Member(s) Responsible for Taking Out the Trash**

Eighty-four percent of Missourians surveyed report that adults are responsible for taking out the trash.

**Amount of Trash Generated by Missouri Households**

Overall, 52 percent of the households surveyed generate two or fewer bags of trash per week, while 32 percent generate four or more bags of waste per week.

**Frequency of Trash Pickup Among Missouri Households**

Among surveyed Missourians with trash pickup, 72 percent have trash pickup once a week, while 24 percent have pickup two times per week.

**Average Monthly Fee for Trash Collection**

On average, surveyed Missourians with trash pickup pay \$16 a month for trash collection, while more 29 percent pay no direct fee (the charge is included in their rent, taxes or some other fee).

**Disposal Methods for Households Without Trash Collection**

Among Missourians surveyed who do not have trash collection, 47 percent say they dispose of their trash by burning it.

**Attitudes Regarding Trash Collection Fees Being Based on Volume**

Seventy percent of the Missourians surveyed say businesses should be charged based on the amount of trash they produce.

Thirty-one percent of the respondents, however, say that consumers should be charged based on the amount of trash produced. Fifty-five percent say all residential households should be charged the same.

**Attitudes Regarding Responsibility for Solid Waste Cleanup**

Forty percent of Missourians surveyed say that individual households should be responsible for disposal of solid waste and trash. Nineteen percent say it is the responsibility of the state of Missouri.

Regarding the cleanup of illegal dump sites, Missourians surveyed are equally likely to say either the state or local government or the person or business that dumped the waste should bear the greatest responsibility.

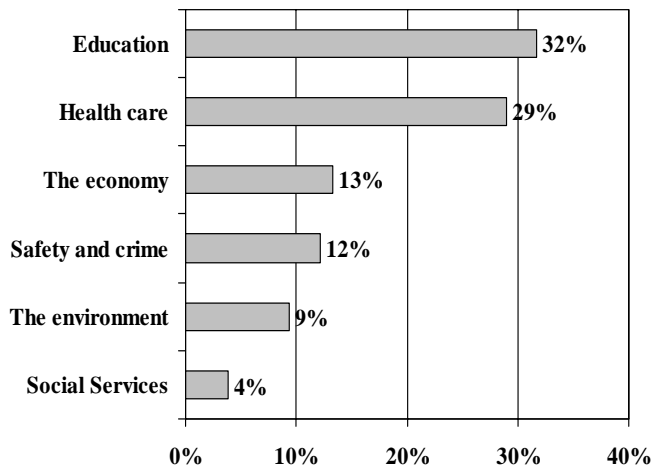
### III. SPECIFIC STUDY FINDINGS

#### Importance of Issues to Missourians

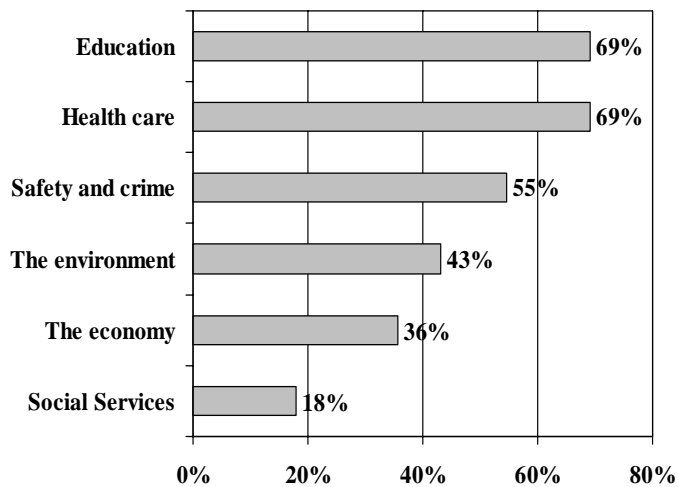
When given a list of six issues, the majority of Missouri residents say ‘education’ (32%) or ‘health care’ (29%) are the most important issues facing the state (*first mention only*).

Combining first, second, and third mentions, ‘education’ and ‘health care’ are the most important issues facing Missourians, with 69 percent selecting each. Fifty-five percent mention ‘safety and crime’ and 43 percent mention ‘the environment.’ ‘Social services’ are rated least important (18%).

**ISSUES MOST IMPORTANT TO MISSOURIANS**  
(FIRST MENTION, ONLY)



**ISSUES MOST IMPORTANT TO MISSOURIANS**  
(FIRST, SECOND AND THIRD MENTIONS COMBINED)

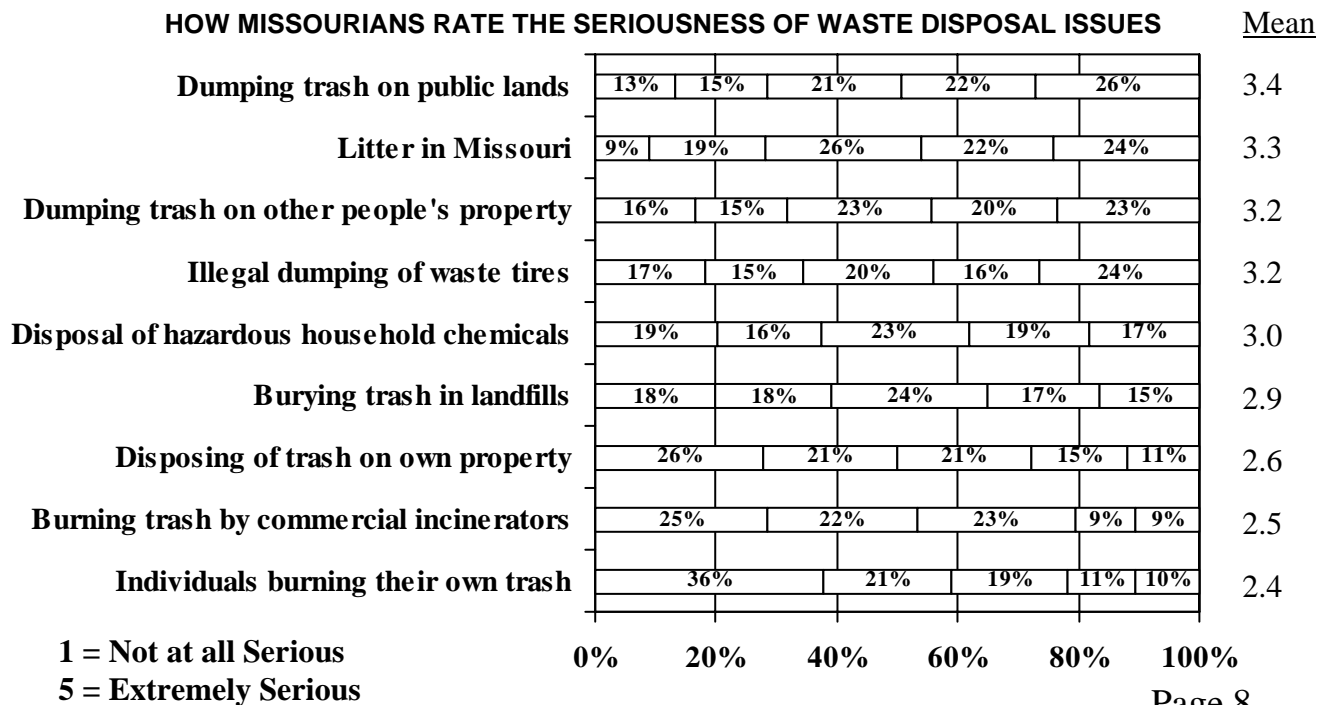
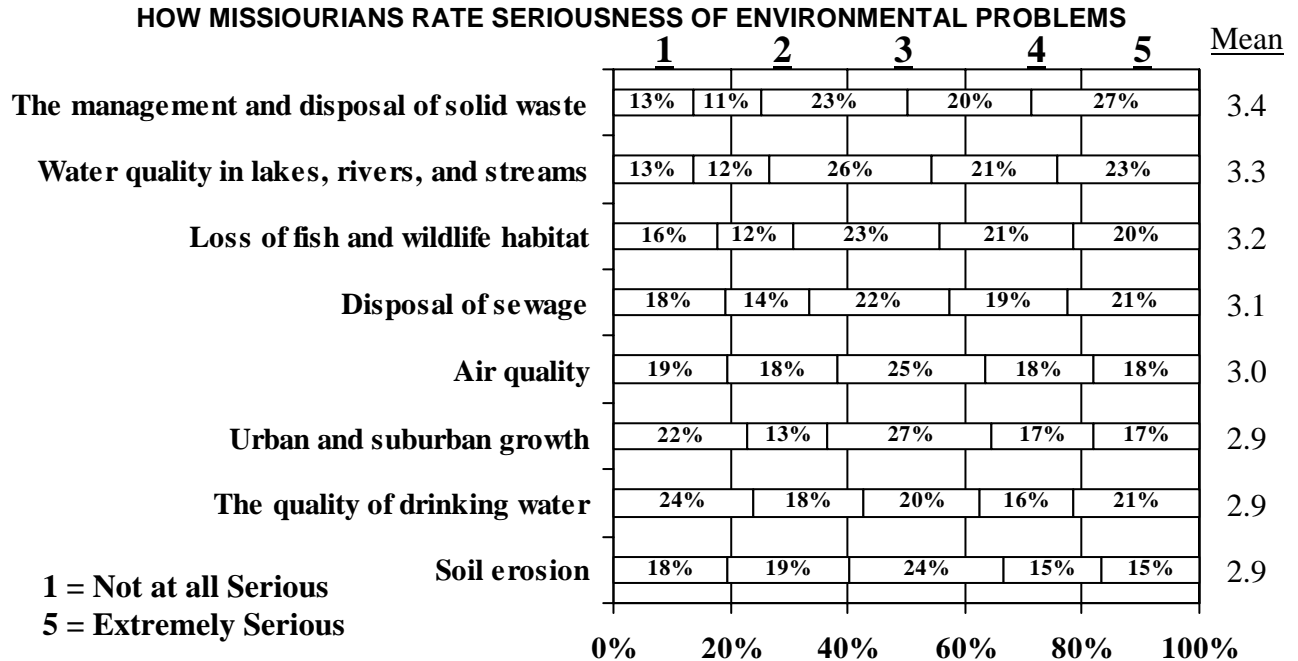




**Seriousness of Environmental Issues to Missourians**

When given a list of eight issues, Missourians who were surveyed rate 'the management and disposal of solid waste' and 'the water quality in lakes, rivers and streams' as the most serious environmental problems in the state. 'Urban sprawl,' 'the quality of drinking water' and 'soil erosion' are rated least serious.

Respondents say the most serious waste disposal problem facing the state is 'dumping trash on public lands' followed by 'litter,' while 'individuals burning trash' is rated lowest.



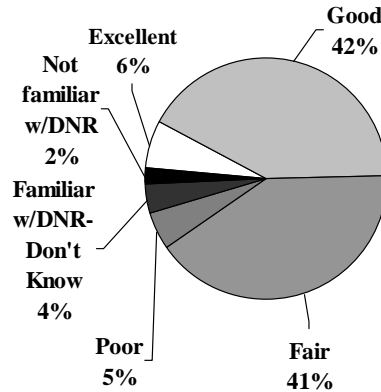
### Perceived Performance of the Department of Natural Resources (DNR)

Missourians surveyed indicate moderate satisfaction with the performance of the Department of Natural Resources (DNR), with 48 percent giving it 'excellent' or 'good' ratings.

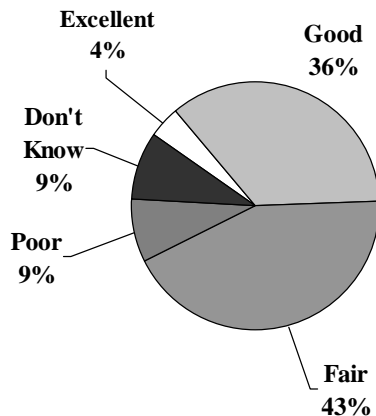
Regarding 'preserving and protecting the state's resources', the mean score is 2.5 -- between "fair" and "good" (*on a scale where 1 = "Poor" and 4 = "Excellent"*) Only two percent of Missourians surveyed say they are not at all familiar with the DNR.

Those familiar with the DNR (n=611) indicate moderate satisfaction with the job the DNR is doing regarding 'inspiring the use of the state's resources' (mean score of 2.6) and regarding 'ensuring solid waste is properly managed' (mean score of 2.4).

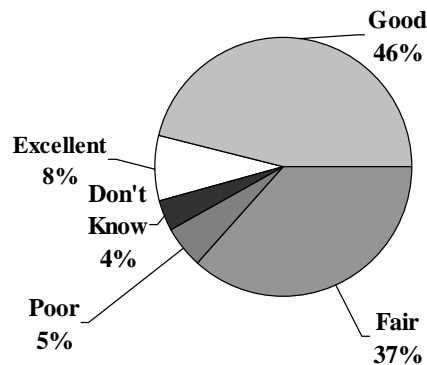
#### HOW GOOD OF A JOB IS THE DNR DOING IN PROTECTING THE STATE'S NATURAL, CULTURAL AND ENERGY RESOURCES?



#### HOW GOOD OF A JOB DO MISSOURIANS PERCEIVE THE DNR IS DOING WITH THE MANAGING OF "SOLID WASTE"?



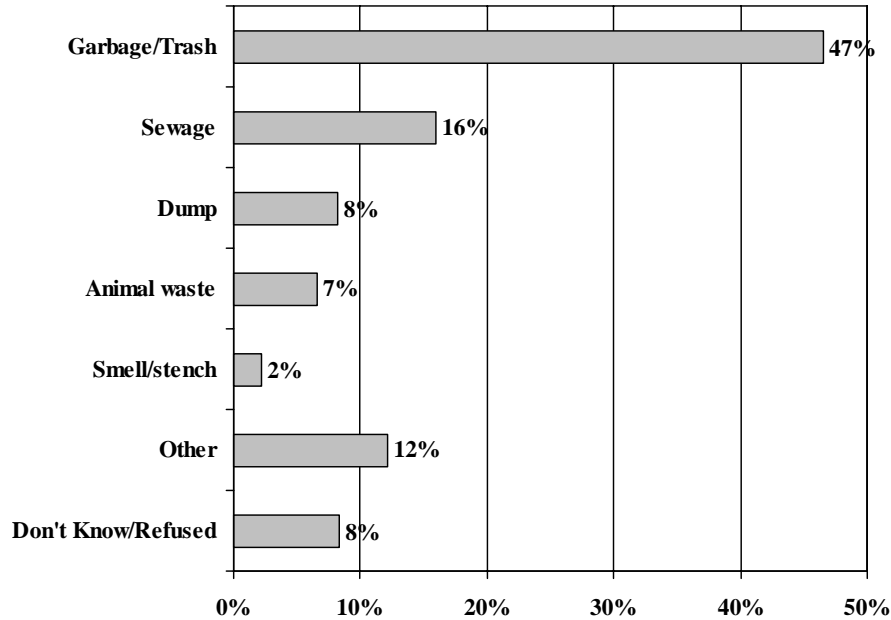
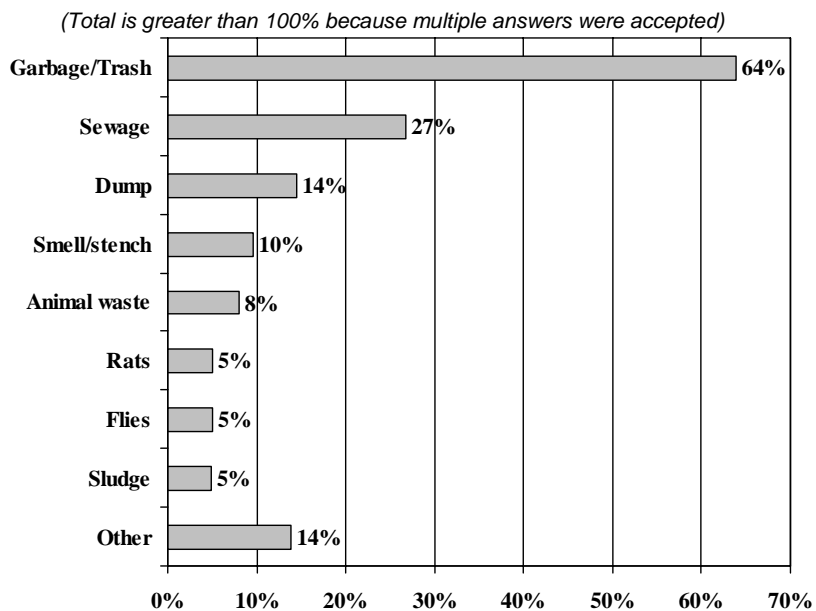
#### HOW GOOD OF A JOB IS THE DNR DOING WITH INSPIRING THE ENJOYMENT AND RESPONSIBLE USE OF THE STATE'S NATURAL RESOURCES?



**What Comes to Mind when Missourians Hear the Term “Solid Waste”**

Sixty-four percent of surveyed Missourians think of either ‘trash’ or ‘garbage’ when they hear the term ‘solid waste.’\* The next most common mention is ‘sewage’ (27%) which may indicate some confusion about what solid waste is. Only a small number mention negative terms like ‘smell,’ ‘stench,’ ‘rats’ or ‘flies.’

*\*First through fifth mention combined.*

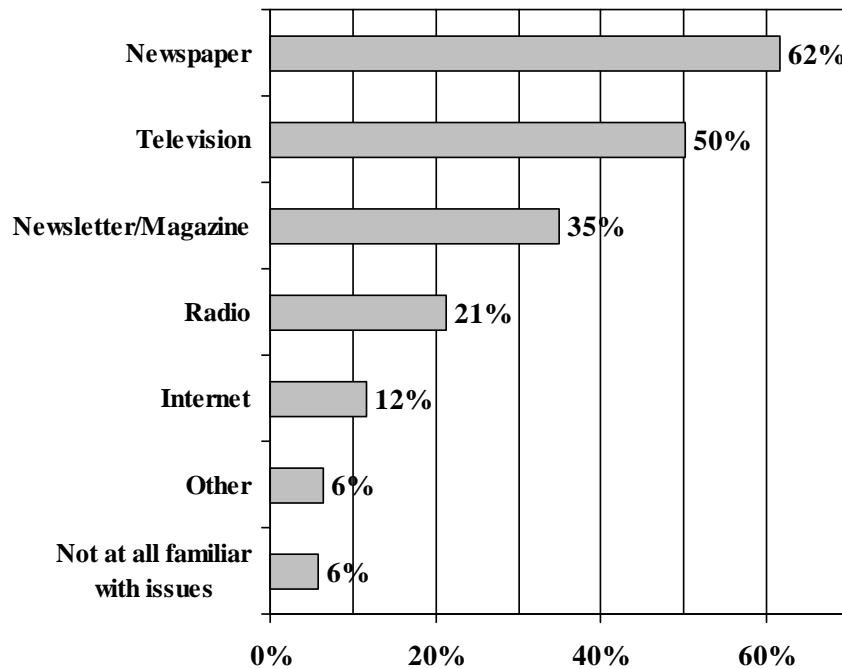
**WHAT MISSOURIANS THINK OF WHEN THEY HEAR THE TERM “SOLID WASTE”  
(FIRST MENTION ONLY)****WHAT MISSOURIANS THINK OF WHEN THEY HEAR THE TERM “SOLID WASTE”  
(FIRST THROUGH FIFTH MENTION COMBINED)**

**Information Sources for Current Issues Related to “Solid Waste”**

The dominant source among surveyed Missourians for information about solid waste is newspapers, with 62 percent of respondents mentioning this source. The next most mentioned sources are television (50%), newsletters and magazines (35%) and the radio (21%).

**HOW MISSOURIANS OBTAIN INFORMATION REGARDING CURRENT ISSUES  
RELATED TO “SOLID WASTE”**

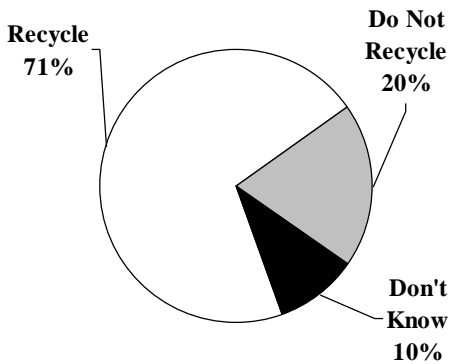
*(Total is greater than 100% because multiple answers were accepted)*



## Recycling Among Missourians

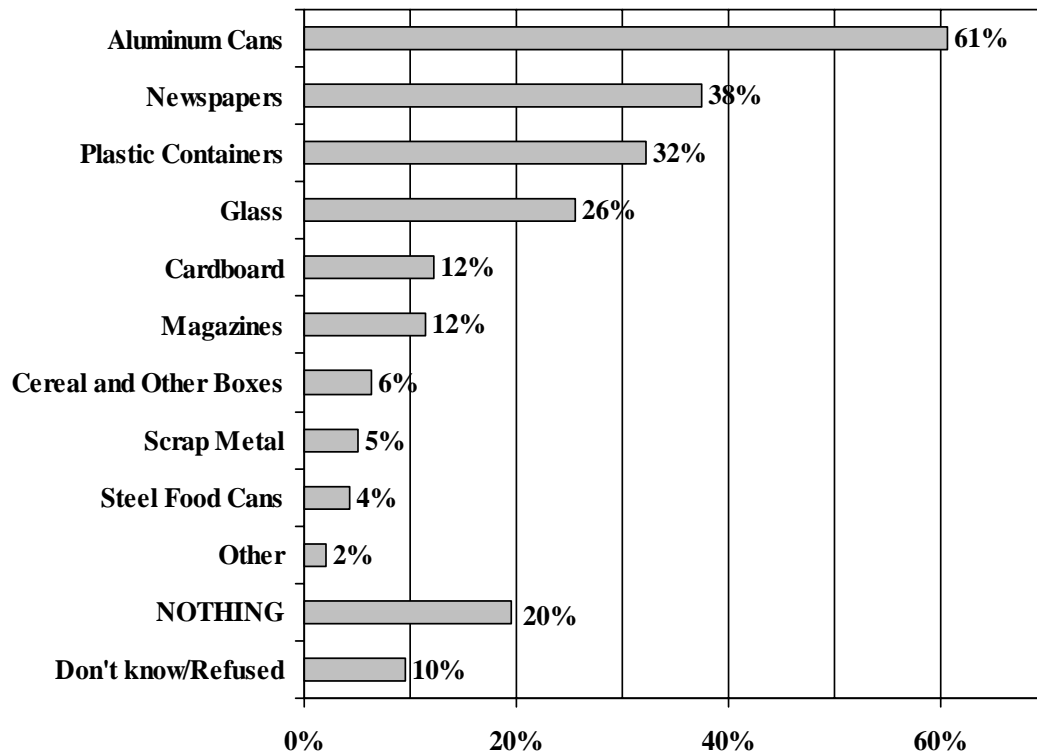
Seventy-one percent of Missourians surveyed say they recycle. Aluminum cans are the item recycled most often, by 61 percent of respondents. The second and third most often recycled items are newspapers (38%) and plastic containers (32%). Twenty-six percent of Missourians surveyed say they recycle glass.

### DOES YOUR HOUSEHOLD RECYCLE?



### WHAT DOES YOUR HOUSEHOLD TYPICALLY RECYCLE?

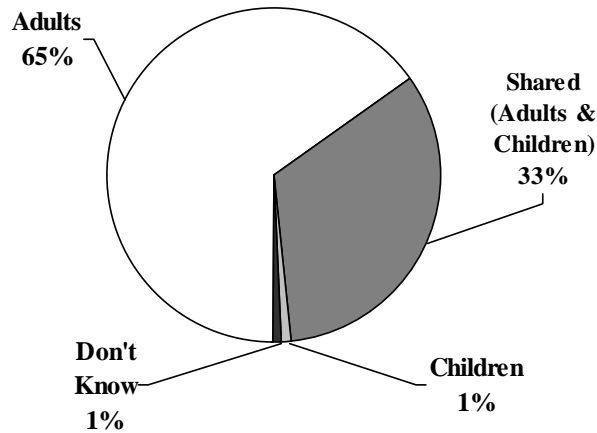
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### Who in the Household Participates in Recycling

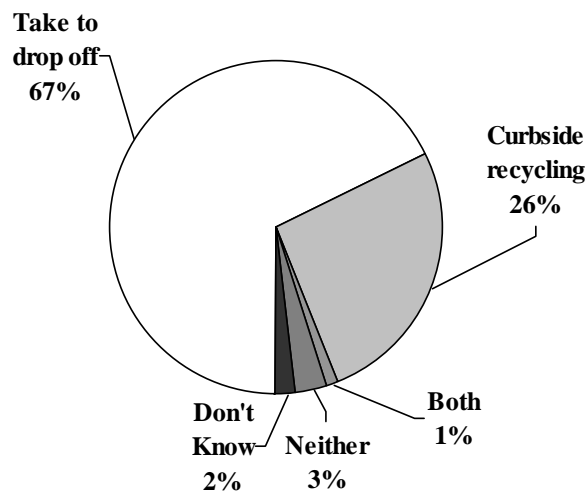
Among surveyed Missourians who recycle (n=442), adults are usually completely (65%) or partially responsible for recycling (33%).

#### WHO IN YOUR HOUSEHOLD PARTICIPATES IN RECYCLING?



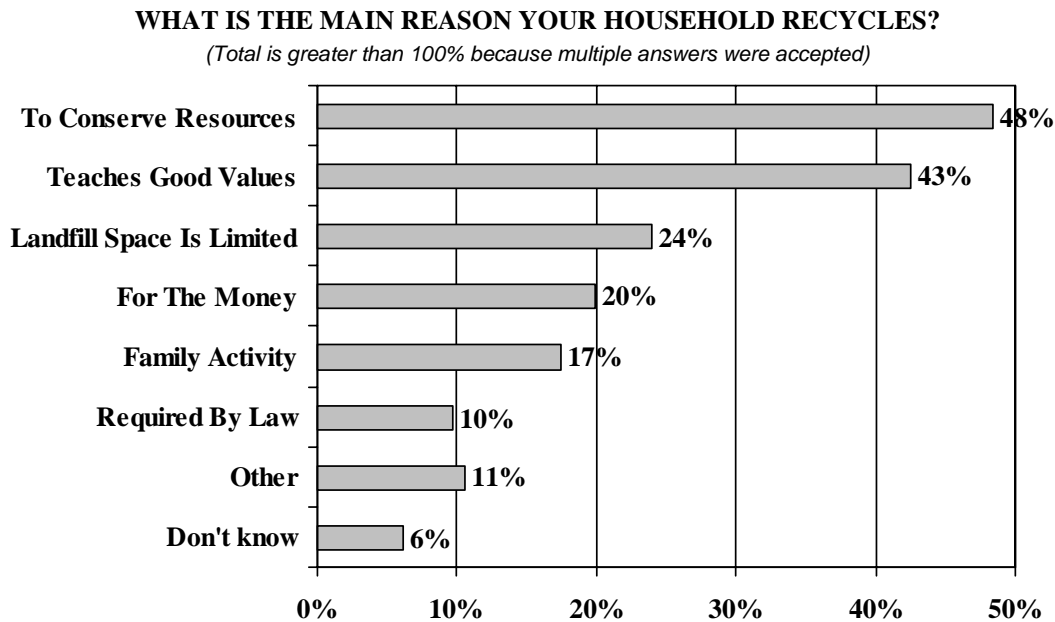
### Availability of Curbside Recycling

Among surveyed Missourians who recycle (n=442), 67 percent take the recyclables to a drop off, while 26 percent have curbside recycling.



### The Main Reason Missouri Households Recycle

Among surveyed Missourians who recycle (n=442), 48 percent say they recycle ‘to conserve resources’ while 43 percent say they recycle ‘to teach good values.’ Twenty-four percent say they recycle because ‘landfill space is limited’ and 20 percent say they recycle for ‘the money.’

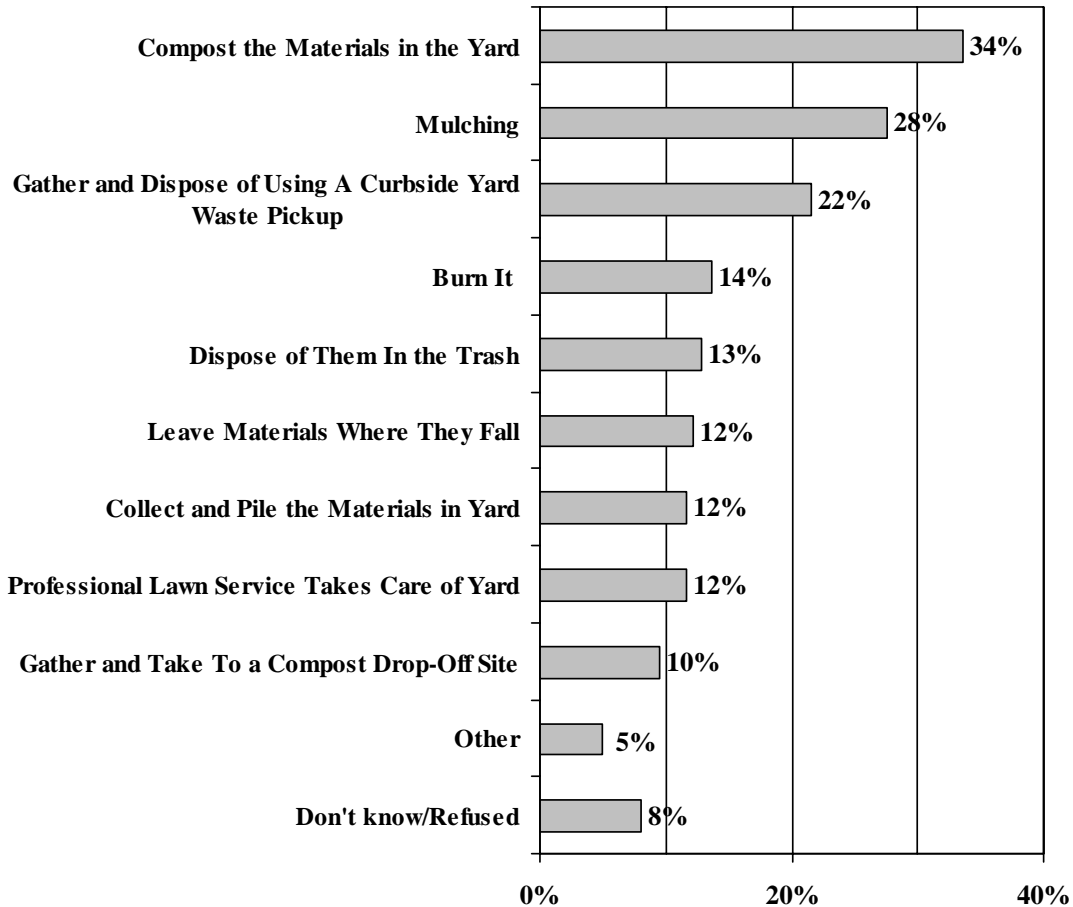


### Management of Yard Waste and Participation in Composting

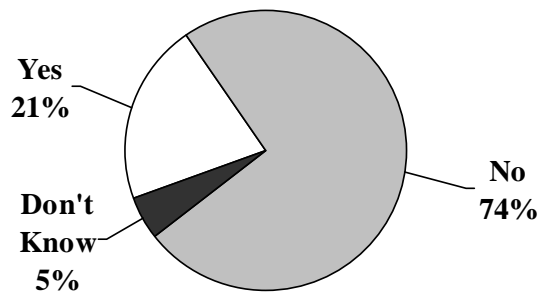
Eighty-six percent of Missourians surveyed live in a household that generates yard waste. Among those who generate yard waste (n=539), 34 percent compost and 28 percent mulch the materials. Those who recycle are significantly more likely than their counterparts to compost their yard waste.

Twenty-one percent of surveyed Missourians say their household composts kitchen waste.

#### WHAT DO YOU TYPICALLY DO WITH THE YARD OR GARDEN WASTES?



#### DOES ANYONE IN YOUR HOUSEHOLD COMPOST KITCHEN WASTE?



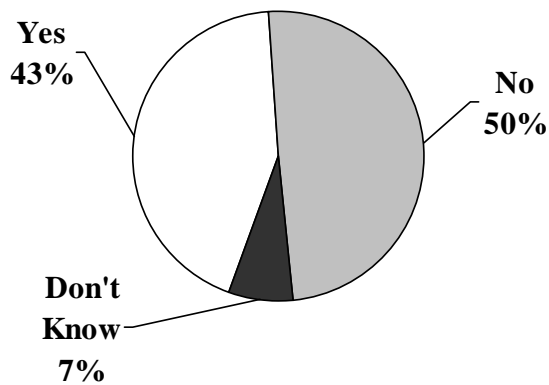


### Household Makes Effort to Buy Items Made from Recycled Materials

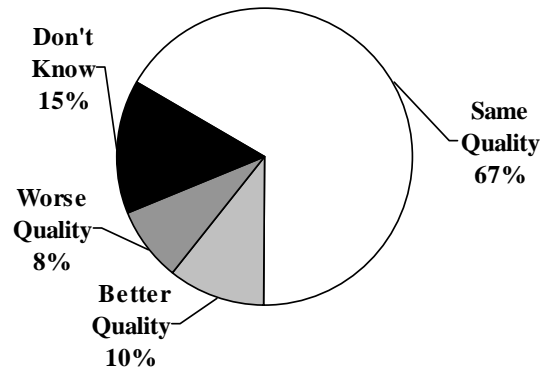
Forty-three percent of Missourians surveyed say they try to buy items made from recycled materials. Among those who make an effort to purchase recycled items (n=270), 57 percent say they buy any item that comes in a recycled package. The most frequently mentioned items are paper products.

Sixty-seven percent of Missourians surveyed say products made from recycled materials offer the same quality as products made from new materials, while 10 percent say they are better, and eight percent say they are worse.

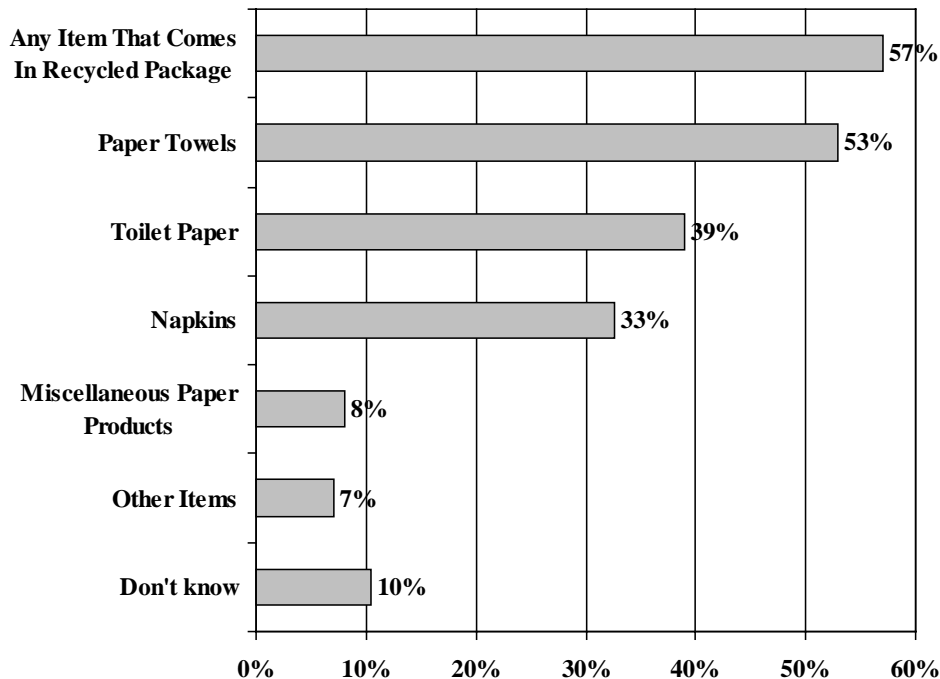
**DOES YOUR HOUSEHOLD TRY TO BUY ITEMS  
MADE FROM RECYCLED MATERIALS?**



**HOW DO YOU PERCEIVE PRODUCTS MADE FROM  
RECYCLED MATERIALS COMPARED TO THOSE MADE  
FROM NEW MATERIALS?**



**WHICH RECYCLED ITEMS DO YOU MAKE AN EFFORT TO BUY?**



### Ways to Promote Recycling in Missouri

Among surveyed Missourians who already recycle (n=442), curbside pickup of recyclables was the most frequent response regarding what would make them recycle more (39%).

Among surveyed Missourians who do not currently recycle (n=182), curbside pickup of recyclables (31%) was also the most frequent response given regarding what would make them more likely to recycle.

#### WHAT WOULD MAKE YOUR HOUSEHOLD RECYCLE (MORE)?

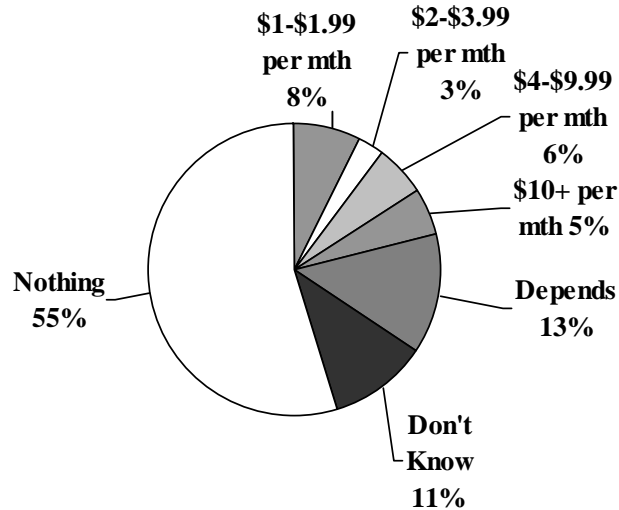
(Total is greater than 100% because multiple answers were accepted)

	Recycle n=442	Do Not n=182
Curbside pickup of recycleables	39%	31%
Get paid more for recycling (pay more per lb.)	16%	12%
Recycling centers -- closer/more convenient location	12%	13%
Knowing where recycling centers are	11%	0%
Recycling centers -- more locations	11%	10%
Charge a deposit/fee on store items	10%	7%
Provide bins for storing recycle-able materials	10%	10%
Law requiring recycling	10%	11%
Charge more for trash disposal than for recycling	5%	7%
Recycling centers -- longer hours	4%	4%
Proactive ads	2%	0%
Other -- Some other comment	8%	9%
Nothing can be done to increase recycling	12%	13%
Don't know/Refused	25%	37%

### Amount Missourians Would Be Willing to Pay to Recycle

Among those Missourians surveyed who currently recycle (n=442), 55 percent say they are unwilling to pay anything extra so they *could* recycle (*if a fee were necessary*). However, a small minority (5%) say they would pay \$10 or more per month.

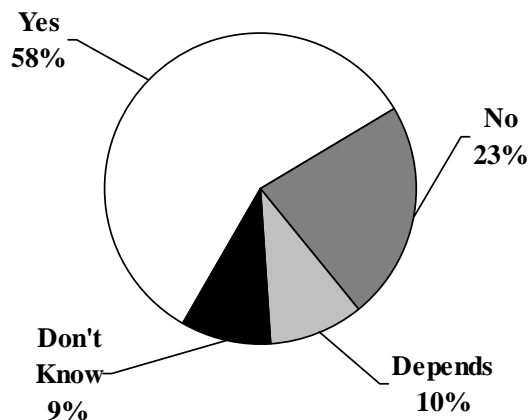
IF NECESSARY, HOW MUCH EXTRA WOULD YOU BE WILLING TO PAY SO YOU COULD RECYCLE?



### Agreement that Manufacturers Should Share Responsibility for Recycling

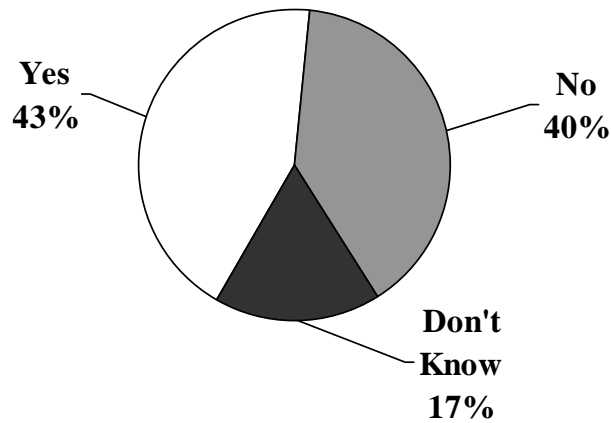
Fifty-eight percent of the Missourians surveyed say manufacturers should share in the responsibility of recycling or disposing of the products they sell to consumers.

SHOULD MANUFACTURERS SHARE IN THE RESPONSIBILITY OF RECYCLING OR DISPOSING OF THE PRODUCTS THEY SELL TO CONSUMERS?

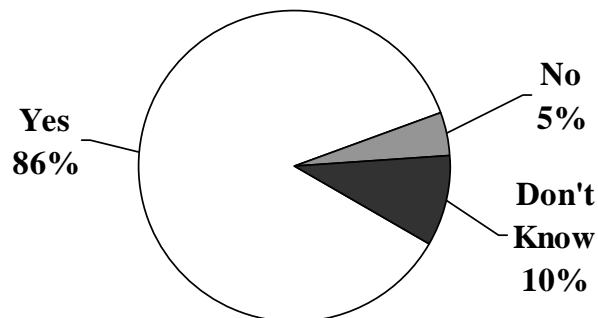


**Support for Increasing Disposal Costs to Make Other Alternatives More Cost Effective**

Missourians surveyed are nearly evenly divided regarding whether disposal costs (fees) should be increased to make the other alternatives more cost effective (43% say 'yes' and 40% say 'no').

**DO YOU THINK THAT DISPOSAL COSTS (FEES) SHOULD BE INCREASED  
TO MAKE THE OTHER ALTERNATIVES MORE COST EFFECTIVE?****Support for Use of Ground Waste Tires as an Ingredient for Highway Pavement**

Eighty-six percent of Missourians surveyed support the increased use of ground waste tires as an ingredient in asphalt for paving highways.

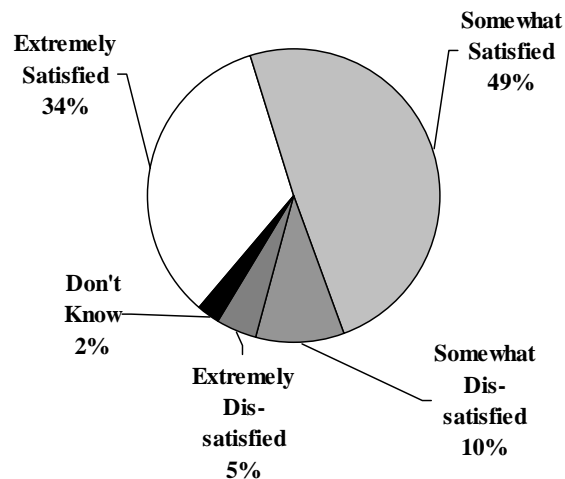
**SHOULD MISSOURI SUPPORT THE INCREASED USE OF GROUND WASTE TIRES  
AS AN INGREDIENT IN ASPHALT FOR PAVING HIGHWAYS?**

### Availability of Trash Collection and Satisfaction with Trash Disposal Options

Ninety percent of Missouri households surveyed are served by trash collection.

Most Missourians surveyed report they are satisfied with their current form of trash removal. Thirty-four percent are “extremely satisfied” and the mean is 3.2 (*on a scale where 1 = “Extremely dissatisfied” and 4 = “Extremely satisfied”*).

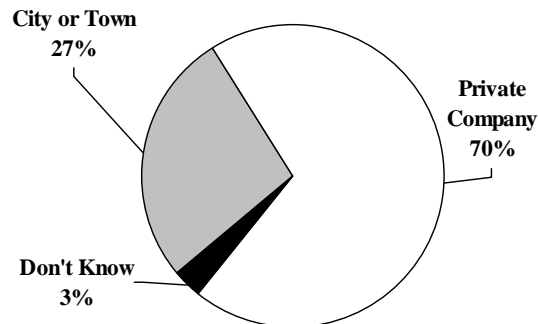
#### HOW SATISFIED ARE YOU WITH YOUR CURRENT FORM OF TRASH DISPOSAL?



### Trash Disposal Provider

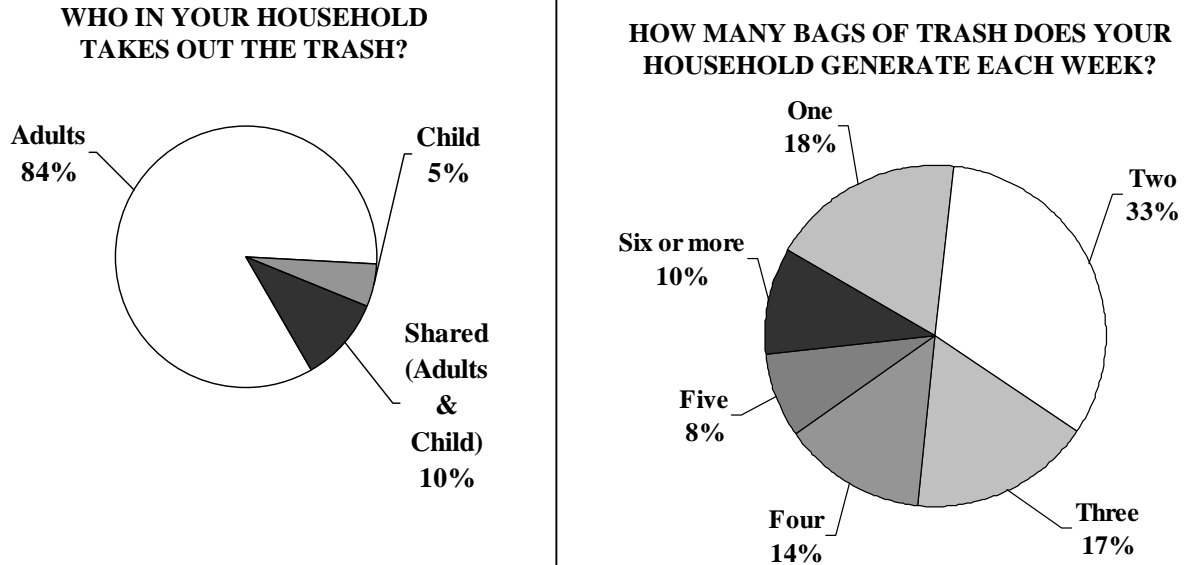
Seventy percent of surveyed Missourians who have trash pickup (n=562) say their trash is collected by a private company, while 27 percent receive the service from their city or town.

#### IS YOUR TRASH COLLECTED BY A PRIVATE COMPANY, OR PROVIDED BY THE CITY OR TOWN?



### Household Member(s) Responsible for Taking Out the Trash

Eighty-four percent of Missourians surveyed report that adults are responsible for taking out the trash.

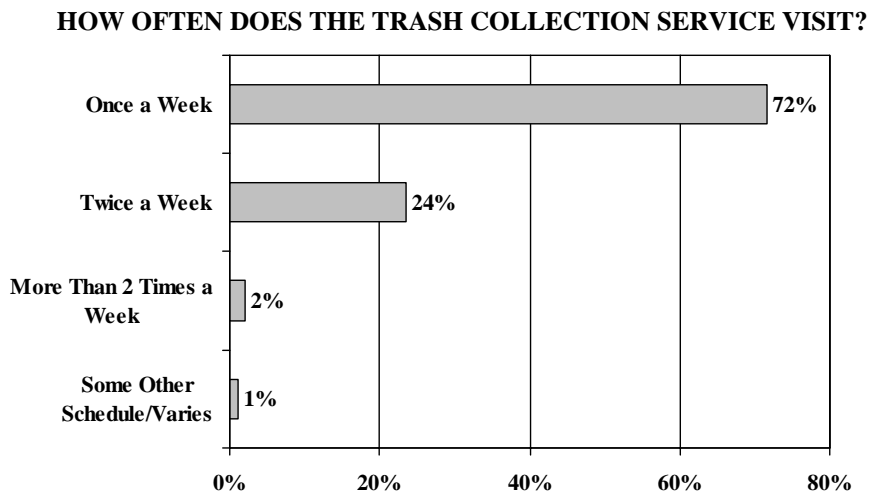


### Average Amount of Trash Generated by Missouri Households

Overall, the average household surveyed generates about three bags of trash per week. Thirty-three percent of households put out two bags, and 52 percent generate one or two bags per week.

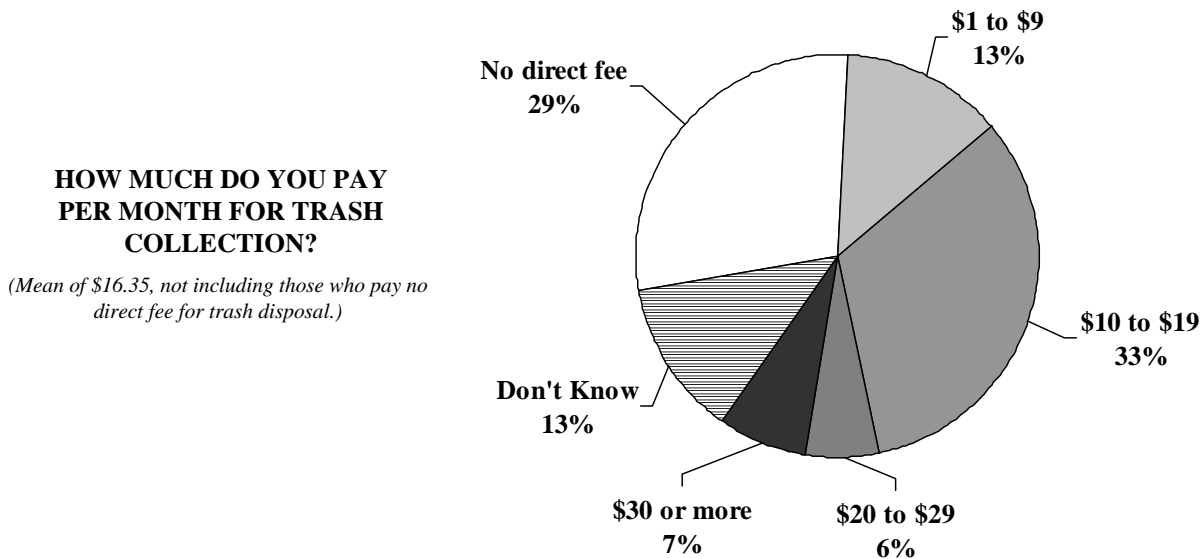
### Frequency of Trash Pickup Among Missouri Households

Among surveyed Missourians with trash pickup (n=562), 72 percent have trash pickup once a week, while 24 percent have pickup two times per week. The average (mean) is 1.3 pickups per week.



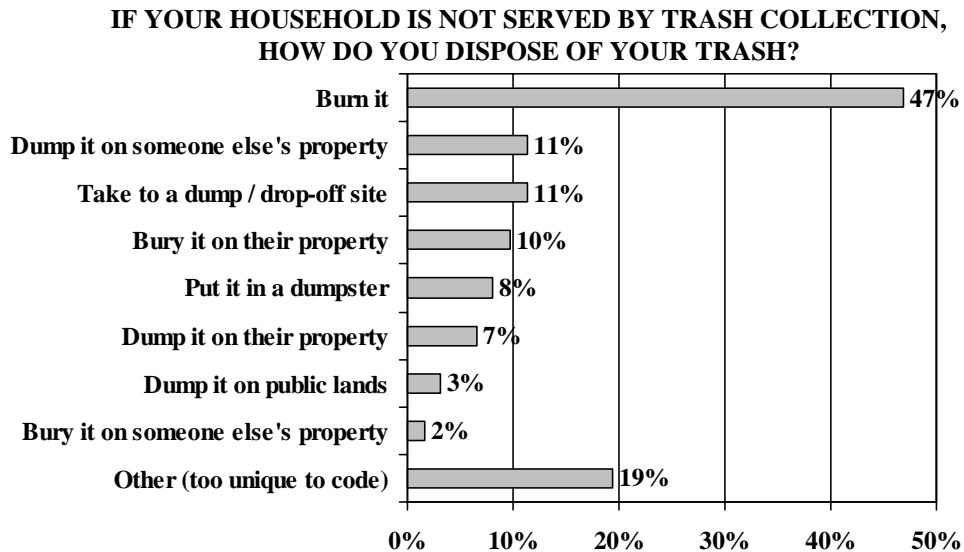
### Average Monthly Fee for Trash Collection

On average, surveyed Missourians with trash pickup (n=562) pay \$16 a month for trash collection, while 29 percent pay no direct fee (the charge is included in their rent, taxes or some other fee).



### Disposal Methods for Households Without Trash Collection

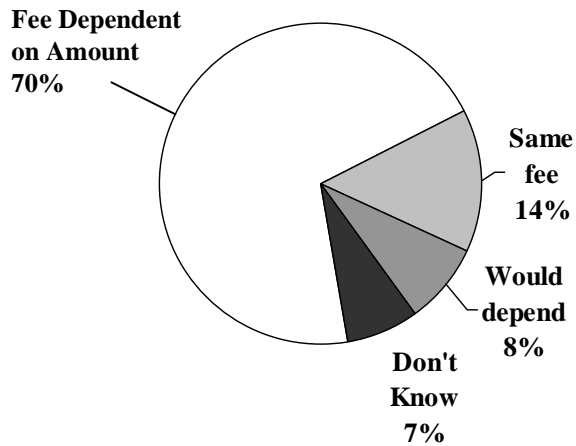
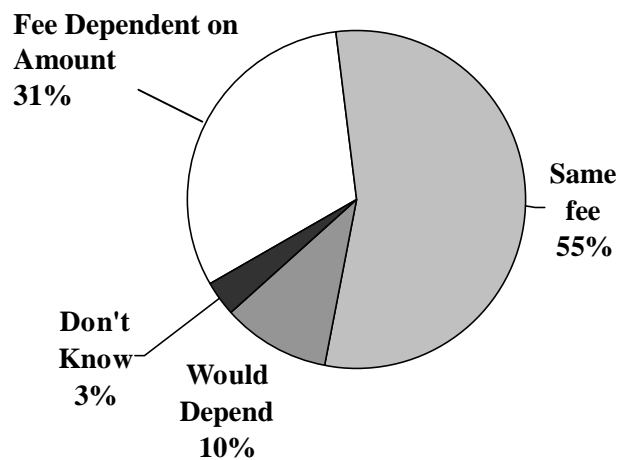
Among surveyed Missourians who do not have trash collection (n=62), 47 percent say they dispose of their trash by burning it.



**Attitudes Regarding Trash Collection Fees Being Based on Volume**

Seventy percent of the respondents in Missouri say businesses should be charged based on the amount of trash they produce.

Thirty-one percent of the respondents, however, say that consumers should be charged based on the amount of trash produced. Fifty-five percent say all residential households should be charged the same.

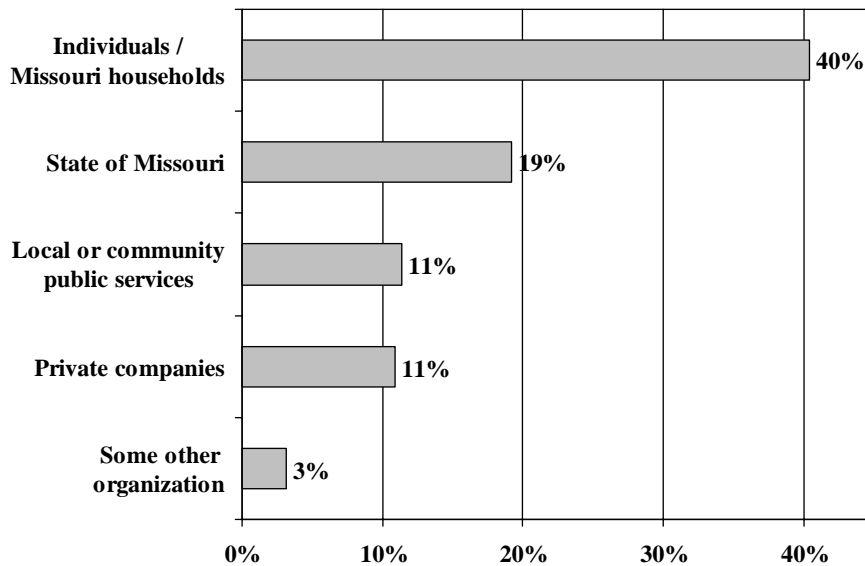
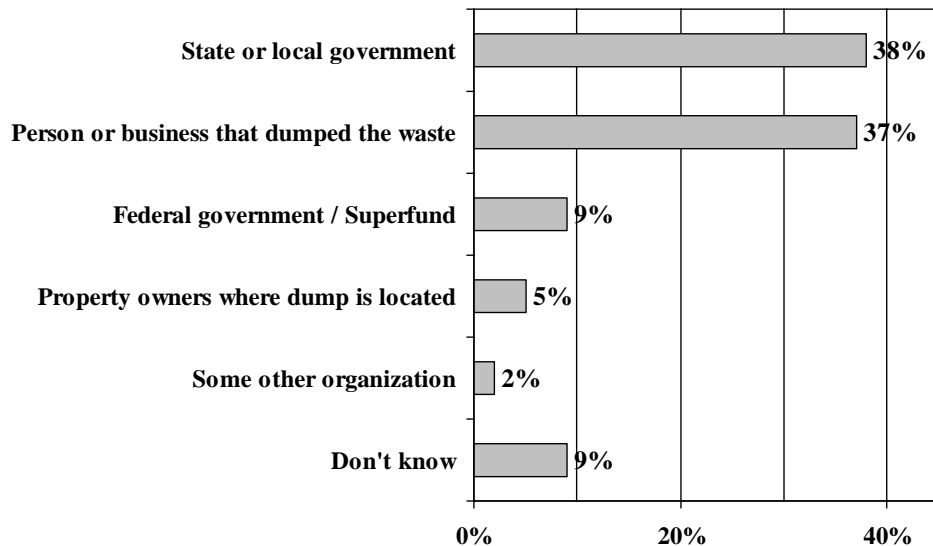
**SHOULD TRASH COLLECTION FEES  
FOR BUSINESSES BE BASED ON  
HOW MUCH TRASH THEY PRODUCE OR  
SHOULD THERE BE A SET FEE?****SHOULD TRASH COLLECTION FEES FOR  
HOUSEHOLDS BE BASED ON HOW MUCH  
TRASH THE HOUSEHOLD PRODUCES OR  
SHOULD THERE BE A SET FEE?**



**Attitudes Regarding Responsibility for Solid Waste Cleanup**

Forty percent of Missourians surveyed say that individual households should be responsible for disposal of solid waste and trash. Nineteen percent say it is the responsibility of the state of Missouri.

Regarding the cleanup of illegal dump sites, Missourians surveyed are equally likely to say either the state or local government (38%) or the person or business that dumped the waste (37%) should bear the greatest responsibility.

**WHO SHOULD HAVE THE GREATEST RESPONSIBILITY  
FOR DISPOSING OF MISSOURI'S SOLID WASTE AND TRASH?****WHO DO YOU THINK SHOULD HAVE THE GREATEST RESPONSIBILITY  
FOR CLEANING UP MISSOURI'S ILLEGAL DUMP SITES?**

# **APPENDIX**

## **SURVEY INSTRUMENT**

## State of Missouri – Solid Waste Management Study

Hello, my name is \_\_\_\_\_ from Pragmatic Research. Today we are calling on behalf of the state of Missouri to ask a few questions about issues that affect you. This is NOT a sales call; the information you provide will help them improve the services they offer. Are you an adult head of the household, 18 years or older?

**IF NO, ASK TO SPEAK TO AN ADULT HEAD OF HOUSEHOLD**  
**IF YES, CONTINUE**

Q1. I am going to read a list of six issues. Please tell me which one is MOST important, 2<sup>nd</sup> most important, and 3<sup>rd</sup> most important. Please do not answer until I have read all six items.

*ROTATE/RANDOMIZE LIST. ACCEPT UP TO 3 ANSWERS.*

1. The economy
2. Safety, crime and crime prevention
3. Social services
4. The environment
5. Education
6. Health Care
7. NONE ARE IMPORTANT
8. DON'T KNOW/REFUSED --- NO MORE ANSWERS

Q2. For each of the following topics, please rate whether or not they are currently an environmental problem in Missouri. Please answer using a scale where 1 means the topic is "Not at all a problem" and 5 means the topic is an "Extremely serious problem." [6 = "Don't know/Refused"]

*ROTATE/RANDOMIZE LIST*

- |  |  |
|--|--|
| A. The quality of drinking water                           |  |
| B. The management and disposal of solid waste              |  |
| C. Urban and suburban growth                               |  |
| D. Air quality   |  |
| E. Soil erosion  |  |
| F. Water quality in Missouri's lakes, rivers, and streams. |  |
| G. Loss of fish and wildlife habitat                       |  |
| H. Disposal of sewage                                      |  |
- Answer Options:  
1=Not at all a problem  
2  
3  
4  
5=Extremely serious problem  
6=Don't Know

- Q3. How good of a job is the Department of Natural Resources doing in preserving and protecting the state's natural, cultural and energy resources? Would you say...
1. "Poor,"
  2. "Fair"
  3. "Good," or
  4. "Excellent"?
  5. Don't Know/Refused [SOMEWHAT FAMILIAR WITH THE DNR.]
  6. NOT AT ALL FAMILIAR WITH DEPARTMENT OF NATURAL RESOURCES
- Q4. **[ASK ONLY IF RESPONDENT IS FAMILIAR WITH DNR]** How good of a job is the Department of Natural Resources doing in inspiring the enjoyment and responsible use of the state's natural resources? Would you say...
1. "Poor,"
  2. "Fair"
  3. "Good," or
  4. "Excellent"?
  5. Don't Know/Refused
- Q5. What first comes to your mind when I use the terms "solid waste"? *[DO NOT READ ACCEPT UP TO 5 ANSWERS.][DO NOT PROBE FOR MORE THAN ONE ANSWER.]*
1. ANIMAL WASTE
  2. DUMP
  3. FLIES
  4. GARBAGE
  5. RATS
  6. SEWAGE
  7. SLUDGE
  8. SMELL/STENCH
  9. TRASH
  10. OTHER (CAPTURE RESPONSE)
  11. DON'T KNOW/REFUSED --- NO MORE ANSWERS
- Q6. **[ASK ONLY IF RESPONDENT IS FAMILIAR WITH DNR.]** The state defines 'solid waste' as the trash created at home or at work *other than* liquid sewage. Based on that definition, how good of a job is the Department of Natural Resources doing in making sure that solid waste is properly managed? Would you say...
1. "Poor,"
  2. "Fair"
  3. "Good," or
  4. "Excellent"?
  5. Don't Know/Refused

- Q7 For each of the following issues, please rate whether or not they are an environmental problem in Missouri. Please answer using a scale where 1 means the issue is “Not at all a problem” and 5 means the issue is an “Extremely serious problem,” or 0 if you don’t know.

*ROTATE/RANDOMIZE LIST*

- |  |                               |
|--|-------------------------------|
| A. Burning trash by commercial incinerators  | <u>Answer Options:</u>        |
| B. Burying trash in landfills  | 1 1=Not at all a problem      |
| C. Disposal of hazardous household chemicals, such as paints, solvents or weed killers | 2                             |
| D. Illegal dumping of waste tires  | 3                             |
| E. Individuals burning their own trash   | 4                             |
| F. Individuals disposing of their trash on their own property                          | 5 5=Extremely serious problem |
| G. Individuals dumping their trash on other people’s property                          | 6=Don’t Know/Ref              |
| H. Individuals dumping their trash on public lands                                     |                               |
| I. Litter in Missouri  |                               |

- Q8. How do you get information about current issues related to solid waste? (*RANDOMIZED LIST ITEMS 1-5. DO NOT READ LIST. ACCEPT UP TO 5 ANSWERS.*)

1. NEWSPAPER
2. TELEVISION
3. INTERNET
4. RADIO
5. NEWSLETTER / MAGAZINE / PUBLICATION
6. OTHER (CAPTURE RESPONSE)
7. NONE / NOT AT ALL FAMILIAR WITH ISSUES
8. DON’T KNOW/REFUSED ----- NO MORE ANSWERS

**TRASH SECTION** =====

- Q9. Who in your household has responsibility for taking out the trash? [*DO NOT READ*]

1. CHILD OR CHILDREN
2. ADULTS
3. SHARED (ADULTS AND CHILDREN)
4. DON’T KNOW/REFUSED

- Q10: How satisfied are you with the options you currently have to dispose of your trash? Are you...

1. Extremely dis-satisfied
2. Somewhat dis-satisfied
3. Somewhat satisfied, or
4. Extremely satisfied?
5. Don’t Know/Refused

Q11. About how many bags of trash does your household generate each week? (ON AVERAGE)?

**[CAPTURE A NUMBER BETWEEN ZERO (NONE) AND 20. DK/REFUSED = 99.]**

Q12: Is your household served by trash collection? *[DO NOT READ]*

1. YES
2. NO [SKIP TO Q.16]
3. DON'T KNOW/REFUSED

Q13: **[ASK IF THEY HAVE TRASH COLLECTION]** How often do they come? (I.E., HOW OFTEN IS YOUR HOUSEHOLD SERVED BY TRASH COLLECTION?) *[DO NOT READ]*

1. ONCE A WEEK
2. TWICE A WEEK
3. MORE THAN 2 TIMES A WEEK
4. SOME OTHER SCHEDULE/VARIES/DEPENDS (CAPTURE RESPONSE)
5. DON'T KNOW/REFUSED

Q14: **[ASK IF THEY HAVE TRASH COLLECTION]** About how much do you pay per month for trash collection? *[IF THEY PAY QUARTERLY, DIVIDE BY 4.]*

**[CAPTURE A NUMBER BETWEEN \$0 (NOTHING) AND \$98. DK/REFUSED = 99.]**

Q15: **[ASK IF THEY HAVE TRASH COLLECTION]** Is your trash collected by a private company, or provided by the city or town? *[IF ASKED: TRASH ONLY, NOT RECYCLEABLES.] [DO NOT READ LIST]*

1. PRIVATE COMPANY
2. CITY OR TOWN
3. DON'T KNOW/REFUSED

Q16: **[ASK ONLY IF RESPONDENT DOES NOT HAVE TRASH COLLECTION]** How do you dispose of your trash? Please be assured that your response is anonymous. *(RANDOMIZE LIST. DO NOT READ LIST. ACCEPT UP TO 3 RESPONSES.)*

1. BURN IT
2. BURY IT ON SOMEONE ELSE'S PROPERTY
3. BURY IT ON THEIR PROPERTY
4. DUMP IT ON PUBLIC LANDS
5. DUMP IT ON SOMEONE ELSE'S PROPERTY
6. DUMP IT ON THEIR PROPERTY
7. OTHER (CAPTURE RESPONSE)
8. DON'T KNOW/REFUSED --- NO MORE ANSWERS

Q17: Do you think trash collection fees for BUSINESSES should be based on how much trash they produce, *or* should all businesses be charged the same amount? *[DO NOT READ.]*

1. COST SHOULD VARY DEPENDING ON HOW MUCH TRASH A BUSINESS PRODUCES
2. THE SAME FEE SHOULD BE CHARGED TO ALL BUSINESSES
3. DEPENDS
4. DON'T KNOW/REFUSED

Q18: For residential households, do you think trash collection fees should be based on how much trash a household produces, *or* should all households be charged the same amount? *[DO NOT READ.]*

1. COST SHOULD VARY DEPENDING ON HOW MUCH TRASH A HOUSEHOLD PRODUCES
2. THE SAME FEE SHOULD BE CHARGED TO ALL HOUSEHOLDS
3. DEPENDS
4. DON'T KNOW/REFUSED

**RECYCLING SECTION =====**

Q19. What does your household typically recycle?  
*[DO NOT READ LIST. ACCEPT UP TO 5 ANSWERS.]*

1. ALUMINUM CANS
2. CARDBOARD
3. CEREAL AND OTHER (SHINY) BOXES
4. GLASS
5. MAGAZINES
6. NEWSPAPER
7. PLASTIC CONTAINERS
8. SCRAP METAL, SUCH AS COPPER OR BRASS
9. STEEL FOOD CANS
10. OTHER (CAPTURE RESPONSE)
11. NOTHING **(SKIP TO "DO YOU BUY RECYCLED?")**
12. DON'T KNOW/REFUSED --- NO MORE ANSWERS

Q20. **[ASK IF THEY RECYCLE.]** Who in your household participates in recycling?  
**[DO NOT READ LIST]**

1. CHILD OR CHILDREN
2. ADULTS
3. SHARED (ADULTS AND CHILDREN)
4. DON'T KNOW/REFUSED

Q21. **[ASK IF THEY RECYCLE.]** What is the main reason your household recycles?  
(RANDOMIZED LIST. DO NOT READ LIST. ACCEPT UP TO 5 ANSWERS.)

1. CONSERVES RESOURCES
2. FAMILY ACTIVITY
3. FOR THE MONEY
4. LAND FILL SPACE IS LIMITED
5. REQUIRED BY LAW
6. TEACHES GOOD VALUES / ENCOURAGES CONCERN FOR ENVIRONMENT
7. OTHER (CAPTURE RESPONSE)
8. DON'T KNOW/REFUSED – NO MORE ANSWERS

Q22: **[ASK IF THEY RECYCLE.]** Do you have curbside recycling or do you take it to a drop-off? [DO NOT READ LIST.]

1. CURBSIDE RECYCLING
2. TAKE IT TO A DROP-OFF
3. BOTH
4. NEITHER
5. DON'T KNOW/REFUSED

Q23: Does your household try to buy items made from recycled materials? [DO NOT READ.]

1. Yes
2. No
3. Don't know/Refused

Q24: **[ASK IF HOUSEHOLD BUYS RECYCLED]** Which items? (DO YOU MAKE A SPECIAL EFFORT TO BUY RECYCLED.) (DO NOT READ LIST. ACCEPT UP TO 5 RESPONSES.)

1. ANY ITEM THAT COMES IN A RECYCLED PACKAGE/BOTTLE/BOX
2. NAPKINS
3. PAPER TOWELS
4. TOILET PAPER
5. OTHER ITEMS (CAPTURE RESPONSE)
6. DON'T KNOW/REFUSED – NO MORE ANSWERS

Q25. Do you think products made from recycled materials offer the same quality as products made from new materials, better quality, or worse quality? [DO NOT READ.]

1. RECYCLED PRODUCTS ARE BETTER
2. RECYCLED PRODUCTS OFFER SAME QUALITY
3. RECYCLED PRODUCTS ARE WORSE
4. DON'T KNOW/REFUSED



Q26. **[IF HOUSEHOLD DOES RECYCLE]** What would make your household recycle more? (THAN IT DOES CURRENTLY, EITHER IN NUMBER OF ITEMS, OR TYPES OF ITEMS)? *[DO NOT READ LIST. ACCEPT UP TO 5 RESPONSES]*

1. CHARGE DEPOSIT / FEE ON STORE ITEMS (CANS, BOTTLES, ETC.)
2. CURBSIDE PICKUP OF RECYCLE-ABLES
3. LAW REQUIRING RECYCLING
4. PAY MORE FOR RECYCLING (PAY MORE PER POUND FOR ALUMINUM, ETC.)
5. KNOWING WHERE RECYCLING CENTERS ARE
6. PROACTIVE ADS
7. CHARGE MORE FOR TRASH DISPOSAL THAN FOR RECYCLING
8. PROVIDE BINS FOR STORING RECYCLE-ABLE MATERIALS
9. RECYCLING CENTERS -- CLOSER / MORE CONVENIENT LOCATION
10. RECYCLING CENTERS – MORE LOCATIONS
11. RECYCLING CENTERS – LONGER HOURS
12. OTHER -- RECYCLING IS MESSY
13. OTHER -- WASTE OF TIME – RECYCLED MATERIALS DUMPED IN LANDFILL, ANYWAY
14. SOME OTHER REASON (CAPTURE RESPONSE)
15. NOTHING CAN BE DONE TO INCREASE RECYCLING
16. DON'T KNOW/REFUSED – NO MORE ANSWERS

Q27. **[IF HOUSEHOLD DOES NOT RECYCLE]** What would make your household recycle? *[DO NOT READ LIST][ACCEPT UP TO 5 RESPONSES]*

1. CHARGE DEPOSIT / FEE ON STORE ITEMS (CANS, BOTTLES, ETC.)
2. CURBSIDE PICKUP OF RECYCLE-ABLES
3. LAW REQUIRING RECYCLING
4. PAY MORE FOR RECYCLING (PAY MORE PER POUND FOR ALUMINUM, ETC.)
5. CHARGE MORE FOR TRASH THAN FOR RECYCLING
6. PROVIDE BINS FOR STORING RECYCLE-ABLE MATERIALS
7. RECYCLING CENTERS -- CLOSER / MORE CONVENIENT LOCATION
8. RECYCLING CENTERS – MORE LOCATIONS
9. RECYCLING CENTERS – LONGER HOURS
10. OTHER -- RECYCLING IS MESSY
11. OTHER -- WASTE OF TIME – RECYCLED MATERIALS DUMPED IN LANDFILL, ANYWAY
12. SOME OTHER REASON (CAPTURE RESPONSE)
13. NOTHING CAN BE DONE TO INCREASE RECYCLING
14. DON'T KNOW/REFUSED --- NO MORE ANSWERS

Q28 **[ASK IF THEY RECYCLE]** If necessary, how much extra would you be willing to pay so you could recycle?

1. Nothing
2. \$1- \$1.99 per month
3. \$2 - \$3.99 per month
4. \$4 - \$9.99 per month
5. \$10 or more
6. DEPENDS
7. DON'T KNOW/REFUSED

**YARD WASTE SECTION =====**

Q29: Does your household have any gardens, grass, trees, or shrubs? *[DO NOT READ]*

1. YES
2. NO
3. DON'T KNOW/REFUSED

Q30: **[ASK ONLY IF THEY HAVE YARD WASTE.]** What do you typically do with the yard or garden wastes? *[DO NOT READ LIST. ACCEPT UP TO 5 ANSWERS.]*

1. A PROFESSIONAL LAWN SERVICE TAKES CARE OF YARD
2. BURN IT
3. COLLECT AND PILE THE MATERIALS IN YOUR YARD
4. COMPOST THE MATERIALS IN YOUR YARD
5. DISPOSE OF THEM IN THE TRASH
6. GATHER AND DISPOSE OF USING A CURBSIDE YARD WASTE PICKUP PROGRAM
7. GATHER AND TAKE TO A COMPOST DROP-OFF SITE
8. LEAVE MATERIALS WHERE THEY FALL
9. MULCHING
10. OTHER (CAPTURE RESPONSE)
11. DON'T KNOW/REFUSED --- NO MORE ANSWERS

Q31: Does anyone in your household compost kitchen waste (IF ASKED, SUCH AS COFFEE GROUNDS, VEGETABLE SCRAPS, ETC.)? *DO NOT READ*

1. YES
2. NO
3. DON'T KNOW/REFUSED

**MISCELLANEOUS SECTION =====**

Q32. Should manufacturers share in the responsibility of recycling or disposing of the products they sell to consumers? *[DO NOT READ LIST]*

1. YES
2. NO
3. DEPENDS ON THE PRODUCT
4. DON'T KNOW/REFUSED

Q33: Who do you think should have the greatest responsibility for disposing of Missouri's solid waste and trash? *[DO NOT READ LIST. SINGLE RESPONSE.]*

1. INDIVIDUALS / MISSOURI HOUSEHOLDS
2. LOCAL OR COMMUNITY PUBLIC SERVICES
3. PRIVATE COMPANIES
4. STATE OF MISSOURI
5. SOME OTHER ORGANIZATION (CAPTURE RESPONSE)
6. DON'T KNOW/REFUSED

Q34: Who do you think should have the greatest responsibility to clean up Missouri's illegal dump sites? *[DO NOT READ LIST. SINGLE RESPONSE.]*

1. FEDERAL / NATIONAL GOVERNMENT OR NATIONAL CLEANUP SUPERFUND
2. PROPERTY OWNERS WHERE THE DUMP IS LOCATED
3. STATE OR LOCAL GOVERNMENT
4. THE RESPONSIBLE PERSON OR BUSINESS THAT DUMPED THE WASTE THERE
5. SOME OTHER ORGANIZATION (CAPTURE RESPONSE)
6. DON'T KNOW/REFUSED

Q35. Recycling and other alternatives to landfills are not cost effective, in many cases. Do you think that disposal costs should be increased to make the other alternatives MORE cost effective? *[DO NOT READ.]*

1. YES
2. NO
3. DON'T KNOW/REFUSED

Q36. Currently, waste tires are being used primarily as a fuel source with some tires being ground up and used for playground materials. Should the state support the increased use of ground waste tires as an ingredient in asphalt for paving highways? *[DO NOT READ.]*

1. YES
2. NO
3. DON'T KNOW/REFUSED

The following questions will help us compare the answers of different groups. Your answers will be kept strictly confidential.

Q37: How many adults live in the household? (Enter a number between 1 and 8. DK=9)

Q38: How many children under 18 live in the household, not including children away at college or in the military? (Enter a number between 0 and 8. DK=9)

Q39: What type of dwelling do you live in? Is it...

1. A single-family house, or
2. A multi-unit apartment or condominium?
3. Some other type of dwelling
4. Don't Know/Refused

Q40: Would you describe your neighborhood as...

1. Downtown or urban,
2. Suburban, or
3. Rural?
4. Don't Know/Refused

Q41: In what year were you born? [CAPTURE BETWEEN (19)0 AND (19)82. DK = 99]

Q42: What was the last grade of school you, yourself, had the opportunity to complete? **(IF NECESSARY, READ LIST)**

1. Grade school or less (0-8)
2. Some high school (9-11)
3. High school graduate (12)
4. Some college or trade school (13-15)
5. College graduate (16)
6. Post graduate (17+)
7. Refused

Q43: Which of the following categories includes the approximate total annual income of your household?

1. Under \$15,000
2. \$15,000 but less than \$25,000
3. \$25,000 but less than \$35,000
4. \$35,000 but less than \$50,000
5. \$50,000 but less than \$75,000
6. \$75,000 or over
7. Refused

Q44: Just to be sure we are talking to a cross section of people, which of the following best describes your ethnic background?

1. White
2. African-American
3. Hispanic
4. Asian
5. Or, some other
6. Refused

That's all the questions I have. Thank you for your time.

Record gender of the respondent.

1. Male
2. Female

Enter Phone Number from sample.

Enter ZIP code from sample.

Enter County Quota (1-20) from sample.

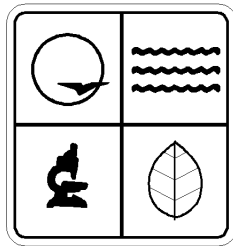
Select Quota County Sub-Type (customized per 20 quota groups) from sample.

Capture month and day of interview.

Record page number of sample.

Capture interviewer name.

**Missouri Department of Natural Resources  
Division of Environmental Quality  
Solid Waste Management Program**



1738 East Elm Street  
Jefferson City, MO 65101-0176  
1(800) 361-4827 or (573) 751-5401

PUB002086

